High Current Feedthru Capacitors
AEC-Q200 Qualified W2H Series

GENERAL DESCRIPTION
High current feedthru capacitors are designed as a broadband EMI filter that is specially designed to have high current handling capability. These SMT feedthru filters offer an optimized frequency response with high attenuation across a wide RF spectrum due to optimized parallel and series inductances. These W2H feedthru filters can actually replace discrete L/C filter networks.

FEATURES
• Low parallel inductance provides significant noise reduction in circuits with operating frequencies up to 5GHz
• Broad frequency response with high attenuation
• High rated current – up to 2A for 080
• Small size – 0805
• Reeling in accordance with EIA-481

HOW TO ORDER
W2H1

Size & Style Voltage Dielectric Capacitance Dielectric
W2H1 = 0805 Ni-Sn 3 = 25v A = NP0 Capacitance Tolerance 8 = ±50/-20%
L2H1 = 0805 SnPb 5 = 50v C = X7R M = ±20%
1 = 100v

MECHANICAL CHARACTERISTICS
• Available in EIA 0805
• Plated Tin over Nickel Barrier
• Packaged in Tape & Reel

TYPICAL APPLICATIONS
• High current power (Vcc) lines
• PA decoupling
• DC:DC converters
• Regulators
• Power supervisory circuits

PINOUT CONFIGURATION

Signal/Vcc

Ground

Signal/Vcc

Ground

W2H1 – 0805 Style
High Current Feedthru Capacitors
AEC-Q200 Qualified W2H Series

ELECTRICAL PARAMETERS

- **Insulation Resistance**: 1000 MΩ Minimum
- **DC Resistance**: <0.150 Ω
- **Operating Temperature**: -55°C to +125°C

CAPACITOR VALUES

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Size</th>
<th>Dielectric</th>
<th>Capacitance</th>
<th>Tolerance</th>
<th>Voltage</th>
<th>Current</th>
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</thead>
<tbody>
<tr>
<td>W2H13C 104 84T</td>
<td>0805</td>
<td>X7R</td>
<td>100,000pF</td>
<td>+50%, -20%</td>
<td>25V</td>
<td>2A</td>
</tr>
<tr>
<td>W2H15C 473 84T</td>
<td>0805</td>
<td>X7R</td>
<td>47,000pF</td>
<td>+50%, -20%</td>
<td>50V</td>
<td>2A</td>
</tr>
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<td>W2H15C 223 84T</td>
<td>0805</td>
<td>X7R</td>
<td>22,000pF</td>
<td>+50%, -20%</td>
<td>50V</td>
<td>1A</td>
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<td>W2H15C 103 84T</td>
<td>0805</td>
<td>X7R</td>
<td>10,000pF</td>
<td>+50%, -20%</td>
<td>50V</td>
<td>1A</td>
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<td>0805</td>
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<td>1A</td>
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<td>W2H11A 471 84T</td>
<td>0805</td>
<td>NP0</td>
<td>470pF</td>
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<td>100V</td>
<td>0.5A</td>
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<tr>
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<td>NP0</td>
<td>220pF</td>
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<td>100V</td>
<td>0.5A</td>
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<td>0805</td>
<td>NP0</td>
<td>100pF</td>
<td>+50%, -20%</td>
<td>100V</td>
<td>0.5A</td>
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<tr>
<td>W2H11A 470 84T</td>
<td>0805</td>
<td>NP0</td>
<td>47pF</td>
<td>+50%, -20%</td>
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<td>0.5A</td>
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<tr>
<td>W2H11A 220 84T</td>
<td>0805</td>
<td>NP0</td>
<td>22pF</td>
<td>+50%, -20%</td>
<td>100V</td>
<td>0.5A</td>
</tr>
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</table>

PHYSICAL DIMENSIONS AND PAD LAYOUT

**W2H1 – 0805 Style**

PHYSICAL DIMENSIONS

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<thead>
<tr>
<th>L</th>
<th>W</th>
<th>T</th>
<th>BW</th>
<th>BL</th>
<th>ES</th>
<th>EW</th>
<th>X</th>
<th>S</th>
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</thead>
<tbody>
<tr>
<td>2.01 ± 0.20</td>
<td>1.25 ± 0.20</td>
<td>1.14 Max.</td>
<td>0.46 ± 0.10</td>
<td>0.18 ± 0.08</td>
<td>0.25 ± 0.13</td>
<td>0.23 ± 0.05</td>
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PAD DIMENSIONS

<table>
<thead>
<tr>
<th>T</th>
<th>P</th>
<th>S</th>
<th>W</th>
<th>L</th>
<th>C</th>
<th>X</th>
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</thead>
<tbody>
<tr>
<td>3.46 (0.138)</td>
<td>0.51 (0.020)</td>
<td>0.76 (0.030)</td>
<td>1.27 (0.030)</td>
<td>1.02 (0.040)</td>
<td>0.46 (0.018)</td>
<td>NA</td>
</tr>
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